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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,489	03/31/2004	Yasushi Aono	04209 /LH	1221

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FRISHAUF, HOLTZ, GOODMAN & CHICK, PC
220 Fifth Avenue
16TH Floor
NEW YORK, NY 10001-7708

EXAMINER

PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/816,489

Applicant(s)

AONO ET AL.

Examiner

Joshua L. Pritchett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-21 and 23-46 is/are pending in the application.
- 4a) Of the above claim(s) 4-21 and 23-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,45 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Amendment filed February 28, 2007. Claims 1, 45 and 46 have been amended as requested by the applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Axelrod ("Total Internal Reflection Fluorescence at Biological Surfaces") in view of Lanni (US 6,055,097).

Axelrod discloses a total internal reflection fluorescence microscope comprising at least one objective (objective) lens which takes light from a specimen (Fig. 5); an image pick-up device (PM or video) which picks up an image of the light taken into the objective lens (Fig. 5); an observation optical path via which light taken into the objective lens is condensed onto the image pickup device (Fig. 5); a condenser lens (P) which is disposed in a position facing the objective lens via the specimen (cells) and which has a numerical aperture that makes possible total internal reflection illumination and which guides a transmitted illuminative light, which is emitted by a light source (from 'I' Fig. 5) into the specimen (Fig. 5 pages 100-101); a base including an upper portion that holds the condenser lens (Fig. 5); a laser oscillation unit which

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outputs the laser beam (I); an optical fiber which transmits the laser beam output from the laser oscillation unit (page 108); a reflection mirror (M) provided at a lower portion of the base to introduce the laser beam output from the optical fiber into a vicinity of the outermost portion of the condenser lens (P); a condensing lens (Lens) which converts the laser beam diverged and emitted from an emission end of the fiber into a convergent light to condense the light in the vicinity of a front focal position of the condenser lens (Fig. 5). Axelrod lacks reference to the mirror moving. Lanni teaches a mirror moving section that moves the reflection mirror (26) with respect to the condensing lens (28) an incidence angle at a boundary of the specimen of the light beam emitted from the condenser lens is changed (col. 8 lines 28-65; Fig. 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the mirror of Axelrod movable in a direction substantially perpendicular to a light path of transmitted illuminative light as taught by Lanni for the purpose of providing different excitations of the specimen to allow a more comprehensive analysis of the specimen.

Response to Arguments

Applicant's arguments, see Amendment, filed February 28, 2007, with respect to the rejection(s) of claim(s) 1, 45 and 46 under Axelrod have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration of the newly amended claim limitations, a new ground(s) of rejection is made in view of Lanni. Applicant amended the claims to require specific movements of the reflection mirror. The Lanni reference was added to teach the claimed movement of the reflection mirror. Applicant also

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argues the prism of Axelrod is not a condenser lens. The prism of Axelrod serves the same function of a condenser and therefore is an obvious functional equivalent.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

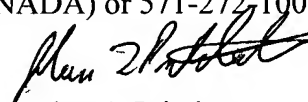
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L. Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joshua L Pritchett
Examiner
Art Unit 2872



Stephone B. Allen
Supervisory Patent Examiner